

Basic arithmetic and the calculator

Topic Test

PART A

Instructions

This part consists of 12 multiple-choice questions

Each question is worth 1 mark

Fill in only ONE CIRCLE for each question

Calculators are NOT allowed

Time allowed: 15 minutes

Total marks = 12

						Marks
1	2.45 =					
	(A) $2\frac{4}{5}$	(B) $2\frac{45}{10}$	(C) $2\frac{45}{100}$	(D) $2\frac{45}{1000}$		1
2	Which of these sets of numbers is arranged in ascending order?					
	(A) 62%, 0.603, $\frac{5}{8}$	(B) 62%, $\frac{5}{8}$, 0.603	(C) 0.603, 62%, $\frac{5}{8}$	(D) $\frac{5}{8}$, 0.603, 62%		1
3	$\frac{48}{2 \times 4} =$					
	(A) 6	(B) 8	(C) 18	(D) 48		1
4	$(-3)^2 + (-2)^3 =$					
	(A) -17	(B) -12	(C) 1	(D) 17		1
5	$-7 + 2 - 4 =$					
	(A) 20	(B) -15	(C) 36	(D) 5		1
6	Which is the smallest number?					
	(A) 0.04	(B) 0.3	(C) 0.32	(D) 0.041		1
7	$(0.3)^2 =$					
	(A) 0.09	(B) 0.9	(C) 9.0	(D) 0.03		1
8	What is the number 6848 rounded to the nearest hundred?					
	(A) 7000	(B) 6900	(C) 6850	(D) 6800		1
9	$(-1)^2 - (-1)^3 =$					
	(A) -2	(B) 2	(C) -1	(D) 1		1
10	$6 \times 9 + 8 \times 7 =$					
	(A) 714	(B) 434	(C) 390	(D) 110		1

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PART A continued

						Marks
11	$25 \times 10^3 =$	(A) 25 000	(B) 20 000	(C) 24 000	(D) 50 000	1
12	$\frac{1}{7} \div \frac{1}{7} =$	(A) $\frac{1}{14}$	(B) $\frac{1}{7}$	(C) $\frac{2}{7}$	(D) $\frac{1}{49}$	1
13	The number three hundred thirty thousand and three may be written as	(A) 300 303	(B) 303 003	(C) 330 003	(D) 3 300 003	1
14	$3^3 \times 3 - 3^3$ simplifies to	(A) 9	(B) 15	(C) 18	(D) 27	1
15	147.65831 correct to two decimal places is	(A) 140.00	(B) 147.65	(C) 147.66	(D) 150.65	1
Total marks achieved for PART A						15

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PART B

Instructions This part consists of 15 questions
Each question is worth 1 mark
Write answers in the answers-only column

Time allowed: 20 minutes

Total marks = 15

Questions	Answers only	Marks
1 Simplify $(-5) \times (-4) \times (-2)$	_____	1
2 Find the cost of 10 books if 2 books cost \$6.95	_____	1
3 Evaluate $\sqrt{11.4} \times 12.5$, correct to two decimal places.	_____	1
4 Simplify $6^2 + \sqrt{64} + \sqrt[3]{343}$	_____	1
5 Which is larger, 0.18 or 1.8%?	_____	1
6 Simplify $4\frac{1}{2} + 5\frac{7}{8}$	_____	1
7 Round off 82.1478 to 2 decimal places.	_____	1
8 Calculate $\frac{\sqrt{2040}}{-21.84 \div 63.2}$ correct to 1 decimal place.	_____	1
9 Find the smallest number which is greater than 2000 and is divisible by 6.	_____	1
Use a calculator to answer the following correct to 2 decimal places.		
10 $\frac{5}{6} \times 3.142 \times 9^3$	_____	1
11 $\frac{1}{\sqrt{23.5} + 3.5^2}$	_____	1
12 $2 \times 87.5 + 5 \times 93.6$	_____	1
13 $\frac{8620}{33.56 + 49.44}$	_____	1
14 $\sqrt{1870} \times 4^4 \times \frac{1}{8}$	_____	1
15 $(-3.5) \times 8.7 \times (-2.9)$	_____	1

Total marks achieved for PART B

15

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PART C

Instructions This part consists of 4 questions
Each question is worth 5 marks
Show all necessary

Time allowed: 20 minutes

Total marks = 20

Questions		Marks
1 Write the number 285.76538 correct to <div> <div>a 3 decimal places _____</div> <div>b 3 significant figures _____</div> <div>c 2 decimal places _____</div> <div>d 2 significant figures _____</div> <div>e 1 decimal place _____</div> </div>		5
2 Evaluate correct to 2 decimal places. <div> <div>a 29.5×25.3 _____</div> <div>b $\frac{68.9}{5.6 + 3.5}$ _____</div> <div>c $\frac{81.7}{12.83 \times 0.89}$ _____</div> <div>d $(9.6)^2 \times \sqrt{31.5}$ _____</div> <div>e $\frac{1.63 + 3.98}{0.78 - 0.53}$ _____</div> </div>		5
3 Evaluate correct to 3 decimal places. <div> <div>a $\sqrt{(5.6)^2 + (8.2)^2}$ _____</div> <div>b $\frac{8.9}{0.5} + \frac{2.73}{0.02}$ _____</div> <div>c $(3.6)^4 + (2.5)^2$ _____</div> <div>d $\sqrt{19 \times 32}$ _____</div> <div>e $0.83 \times (3.15)^2$ _____</div> </div>		5
4 Evaluate correct to 3 significant figures. <div> <div>a $(8.5)^2 + 2.5 \times 1.2$ _____</div> <div>b $(3.8)^2 - (4.3)^2$ _____</div> <div>c $7.8 \div \sqrt{21.6}$ _____</div> <div>d $48.5 \div (1.3^2 + 21.7)$ _____</div> <div>e $\sqrt{(6.3)^3}$ _____</div> </div>		5

Total marks achieved for PART C

20